

What is claimed is:

1. An electrode-built-in susceptor comprising:

a susceptor base body which is made of an aluminium-nitride-group-sintered-member on one of which surface a plate sample is mounted;

an inner electrode which is built in the susceptor member;

a power supplying terminal which is disposed in the susceptor base body so as to be attached to the inner electrode; and

an insulating layer which is formed mainly by one of a boron nitride, a lithium oxide, an aluminium oxide, or a magnesium oxide is formed between the inner electrode and the mounting surface.

2. An electrode-built-in susceptor comprising:

a susceptor base body which is made of an aluminium-nitride-group-sintered-member on one of which surface a plate sample is mounted;

a plurality of inner electrodes which are built in the susceptor member;

a plurality of power supplying terminals which are disposed in the susceptor base body so as to be attached to each of a plurality of the inner electrodes; and

an insulating layer which is formed mainly by one of a boron nitride, a lithium oxide, an aluminium oxide, or a magnesium oxide is formed between the inner electrode which is disposed the most closely to the mounting surface and the mounting surface, or between a pair of inner electrodes which neighbor each other among a plurality of the

inner electrodes, or between the inner electrode which is disposed the most closely to the mounting surface and the mounting surface and between a pair of inner electrodes which neighbor each other among a plurality of the inner electrodes.

3. An electrode-built-in susceptor according to Claim 1 wherein the power supplying terminal is formed by a conductive aluminium-nitride-tantalum-nitride-composite-sintered-member.

4. An electrode-built-in susceptor according to Claim 1 wherein the power supplying terminal is provided with a first power supplying terminal which is connected to the inner electrode and formed by a conductive aluminium-nitride-tungsten-nitride-composite-sintered-member and a second power supplying terminal which is connected to the first power supplying terminal and formed by a conductive silicon-carbide-sintered-member a part of which is exposed from the susceptor base body.

5. An electrode-built-in susceptor according to Claim 1 wherein:

the susceptor base body which is made of an aluminium-nitride-group-sintered-member on one of which surface a plate sample is mounted and a supporting plate which is formed by a aluminium-nitride-group-sintered-member for supporting the mounting plate from therebeneath; and

the insulating layer is formed in the mounting plate.